

LEVEL 1 MATERIALS AND PROCESSING TECHNOLOGY 2024

Welcome to Level 1 Materials and Processing Technology!

Kaua e rangiruatia te hāpai o te hoe; e kore tō tātou waka e ū ki uta.

Do not lift the paddle out of unison; our canoe will never reach the shore.

Our Ministry-gifted Curriculum Learning Area Whakataukī encourages us to work together, to collaborate, to share our vision of where we are going and how we will get there – together. It challenges us to take this idea and incorporate it into our world view and our vision for the future. This is a concept that applies to everything we do to ensure a successful future for everyone. We may hit choppy waters and occasionally fall out of our waka, but working together will ensure we eventually all make it safely to our shared destination.

[Course outline and assessments \(students will complete both internals and choose 1 external\)](#)

Achievement standard number	Subject reference	Version number	Topic/title	Mode of assessment	Credits
92012	1.1	3	Develop a materials and processing technology outcome in an authentic context	Internal	6
92013	1.2	3	Experiment with different materials to develop a materials and processing technology outcome	Internal	6
92014	1.3	3	Demonstrate understanding of sustainable practices in the development of a materials and processing technology design	External	4
92015	1.4	3	Demonstrate understanding of techniques selected for a feasible materials and processing technology outcome	External	4

Big Ideas

The big ideas underpinning the new Level 1 standards (corresponding to level 6 of the curriculum) are authentic contexts, creative problem solving, design empathy for

enhancement, and sustainability. These ideas sit under the umbrella of mātāpono Māori principles of tukanga, manaakitanga, kaitiakitanga, rangatiratanga, whanaungatanga, Kotahitanga, wairuatanga and auahatanga, along with the Pacific values of alofa, vā, fonua, vaka and kuleana.

Students will understand how these principles and values can be woven together during the development and creation of technological outcomes.

Students will **understand**:

- The importance of whanaungatanga through wānanga and talanoa to develop outcomes centred around the needs of a person, whānau or community
- The influence of worldviews and society during the development of an outcome
- How 'ka mua, ka muri' influences reflective practice during the development of an outcome
- Understand the importance of cultural and physical safety in the development of their outcomes

Students will **know**:

- How to use planning, testing and stakeholder feedback to inform their decision making as they develop their outcomes
- How to use technological practice to solve real-world problems and realise opportunities during the development of their outcomes

Students will **do**:

- Explore the properties of materials during the development of their outcomes
- Explore techniques to determine appropriate functional attributes during the development of their outcomes
- manipulate, transform, combine and form materials during the development of their outcomes
- apply sustainable practices during the development of their outcomes

Be the Change

Students will explore a variety of sustainability concepts within the realm of the fashion world. They will explore using sustainable materials and fibres, experiment with a selection of slow fashion techniques, explore zero-waste patterns and upcycling of materials, and learn about the ramifications of material disposal on the earth and how to mitigate these.

Be You

Students will explore concepts of identity; how what we wear, what materials we choose, and how we dress all express our identities and worldviews. How can we be sustainable and expressive? How can we make a difference in the world by communicating through our clothing choices? How can we express ourselves safely? How can we help others do the same?